

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** A CDMA base transceiver system, ~~the CDMA base transceiver system adapted~~ operable to perform wireless communications through the use of ~~by using~~ a CDMA method, said CDMA base transceiver system comprising:
 - ~~an FPGA that processes~~ operable to process a signal at a chip rate ~~through the use of~~ by using FPGA program data;
 - a DSP ~~that processes~~ operable to process a signal at a symbol rate ~~through the use of~~ by using DSP program data; and
 - program data setting means ~~that sets~~ for setting the FPGA program data used by the ~~said~~ FPGA and the DSP program data used by the ~~said~~ DSP; and
 - memory connection means for connecting to an external memory; wherein:
said program data setting means sets the program data by reading the program data stored in the external memory connected to said memory connection means; wherein:
 - a base band part is constructed by using said FPGA and DSP;
 - FPGA configuration data is used as the FPGA program data;
 - DSP firmware is used as the DSP program data;
 - said FPGA comprises,
 - a searcher part which includes a matched filter, a profile memory bank, and a path detection part,
 - a finger part which includes a plurality of signal processing systems disposed in said finger part, each of said plurality of signal processing systems being respectively constituted by a correlator and a memory,
 - a diffusion code generation part, and
 - a diffusion modulation part;
 - said DSP comprises
 - a pilot synchronous detection part constituted in said searcher part,
 - a plurality of synchronous detection parts constituting a plurality of said signal processing systems disposed in said finger part, the number of said plurality of synchronous detection parts being equal to the number of said plurality of signal processing systems,
 - a composer part,

a physical frame separation part,
a decoder part,
a coder part,
a physical frame multiplexing part, and
a transmission frame generation part;
in said searcher part,
said matched filter is operable to obtain a correlation value between a
reception signal and a diffusion code while making the timings with which
multiplication between the reception signal and the diffusion code is performed
different from each other;
said pilot synchronous detection part is operable to perform synchronous
detection of a pilot signal by using the correlation value obtained by said matched
filter;
said profile memory bank is operable to store the correlation value
obtained by said matched filter and the synchronous-detected result obtained by
said pilot synchronous detection part; and
said path detection part is operable to detect the path of the reception
signal by using the obtained correlation value and the obtained synchronous-
detected result;
in each of said respective signal processing systems disposed in said finger part,
said correlator is operable to, for each detected path detected by said
search part, perform multiplication between the reception signal and the diffusion
code so as to perform inverse diffusion and thereby obtain a correlation value
between the reception signal and the diffusion code;
said memory is operable to store the correlation value obtained by said
correlator; and
said synchronous detection part is operable to perform synchronous
detection of the post-inverse-diffusion reception signal according to the
correlation value stored in said memory;
said composer is operable to compose the synchronous-detected results,
corresponding to a plurality of paths, inputted from said finger part, to output the

composed result as a final reception signal to said physical frame separation part, to detect a signal power/interference power ratio with regard to the composed result, to generate, according to the detected signal power/interference power ratio, a transmission power control bit for controlling a transmission power, and to output the generated transmission power control bit to said transmission frame generation part;

said physical frame separation part is operable to perform separation of physical channels with respect to the reception signal inputted from said composer part and to output the post-separation reception signal to said decoder part;

said decoder part is operable to perform de-interleave processing or error correction decoding with respect to the reception signal inputted from said physical frame separation part;

said coder part is operable to perform interleave processing or error correction coding with respect to the transmission signal and to output the post-processing transmission signal to said physical frame multiplexing part;

said physical frame multiplexing part is operable to perform mapping into physical channels with respect to the post-processing transmission signal inputted from said coder part and to output the post-mapping transmission signal to said transmission frame generation part;

said transmission frame generation part is operable to generate, by using the post-mapping transmission signal inputted from said physical frame multiplexing part, a transmission frame, to output the generated transmission frame to said diffusion modulation part, and to control the transmission power according to the transmission power control bit inputted from said composer part;

said diffusion code generation part is operable to generate a diffusion code and to output the generated diffusion code to said diffusion modulation part; and

said diffusion modulation part is operable to perform diffusion modulation of the transmission frame inputted from said transmission frame generation part by using the diffusion code inputted from said diffusion code generation part.

2-8. (Cancelled)

9. (Currently Amended) A base transceiver system providing system comprising:

base transceiver system information storage means ~~that stores~~for storing, regarding a plurality of base transceiver systems each having ~~set therein~~program data set therein corresponding to a communication system selected from among a plurality of communication systems and thereby performing wireless communications through the use of the selected communication method, information concerning whether each of the plurality of base transceiver systems is being utilized by a communication service company;

search means ~~that for~~, according to the stored contents of ~~the said~~ base transceiver system information storage means, ~~makes search~~searching for an ~~empty one of a base transceiver system from among the plurality of~~ base transceiver systems which is not being utilized by a communication service company;

register means ~~that for~~, according to a request made from the communication service company wanting to utilize the base transceiver system searched by ~~the said~~ search means, ~~changes~~changing the stored contents of ~~the said~~ base transceiver system information storage means ~~in with~~ regard to the base transceiver system to ~~those wherein this indicate that the~~ base transceiver system is being utilized by the communication service company; and

program data setting means ~~that sets for~~ setting, to the base transceiver system, the program data corresponding to the communication method that the communication service company utilizes ~~to the base transceiver system~~.

10. (Currently Amended) A base transceiver system providing system according to claim 9, wherein:

~~the said~~ base transceiver system information storage means further stores ~~therein~~ information therein regarding ~~the installing place~~a place of installation of each base transceiver system and information regarding ~~the a~~ cell area of each base transceiver system; and

~~the said~~ base transceiver providing system further comprises display means ~~that makes a display/output of~~ for displaying/outputting information, and display control means ~~that causes for causing~~ the ~~installing place~~place of installation and the cell area of

the base transceiver system to be displayed on a map by ~~the~~said display means according to the stored contents of ~~the~~said base transceiver system information storage means.

11. **(Currently Amended)** A base transceiver system providing system according to claim 9, further comprising: program data storage means ~~that stores for storing~~ program data, said program data storage means being ~~and that is connected~~ to the base transceiver system via ~~the~~ relevant lines,

~~whereby the~~ wherein said program data setting means transmits, according to ~~the fact that~~ a change that has occurred due to ~~the~~ an operation of ~~the~~ said register means, the program data stored in ~~the~~ said program data storage means to the base transceiver system via the relevant lines to thereby set the transmitted program data to the base transceiver system.

12. **(Currently Amended)** A base transceiver system providing system according to claim 10, further comprising: program data storage means ~~that stores for storing~~ program data, ~~and that is~~ said program data storage means being connected to the base transceiver system via the relevant lines,

~~whereby the~~ wherein said program data setting means transmits, according to ~~the fact that~~ a change that has occurred due to ~~the~~ an operation of ~~the~~ said register means, the program data stored in ~~the~~ said program data storage means to the base transceiver system via the relevant lines to thereby set the transmitted program data to the base transceiver system.

13. **(Cancelled)**